Application No. 09/875,084
Amendment Under 37 C.F.R. §1.116 dated August 26, 2004
Response to the Office Action dated June 14, 2004

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (Currently Amended): An optical scanning-type touch panel, comprising:

an optical scanning unit for angularly scanning light in a plane substantially parallel to a predetermined region;

a deflecting unit for deflecting scanning light of said optical scanning unit; and

a light receiving unit for receiving the deflected scanning light, for detecting a scanning light cut-off position, which is produced in said predetermined region by an indicator, based on a light receiving output of said light receiving unit that corresponds to a scanning angle,

~~said optical scanning-type touch panel being characterized in that~~ wherein said deflecting unit has an asymmetrical shape about an optical axis.

Claim 2 (Original): The optical scanning-type touch panel as set forth in claim 1, wherein the shape of said deflecting unit is asymmetrical in a scanning direction.

Claim 3 (Original): The optical scanning-type touch panel as set forth in claim 1, wherein the shape of said deflecting unit is asymmetrical in a height direction.

Claim 4 (Original): The optical scanning-type touch panel as set forth in claim 3,

wherein a height of said deflecting unit is substantially equal to a height of said optical scanning unit.

Claim 5 (Original): The optical scanning-type touch panel as set forth in claim 4,

wherein said predetermined region has a rectangular shape, and a width of said deflecting unit is substantially equal to a scanning surface opening width of said optical scanning unit in scanning a diagonal section of said predetermined region with light.

Claim 6 (Currently Amended): An optical scanning-type touch panel, comprising:

an optical scanning unit for angularly scanning light in a plane substantially parallel to a predetermined region;

a deflecting unit for deflecting scanning light of said optical scanning unit; and

a light receiving unit for receiving the deflected scanning light, for detecting a scanning light cut-off position, which is produced in said predetermined region by an indicator, based on a light receiving output of said light receiving unit that corresponds to a scanning angle,

wherein said optical scanning-type touch panel ~~being characterized by satisfying~~ satisfies a condition

$$d/2 + w < D\tan\delta$$

where D is a distance from said optical scanning unit to said deflecting unit, w is a width on said deflecting unit from a path of said scanning light to an end on said predetermined region side, d is a beam width of said scanning light, and δ is a scanning start angle.

Claim 7 (Currently Amended): An optical scanning-type touch panel, comprising:

a light retro-reflector provided outside a predetermined region;

an optical scanning unit for angularly scanning light in a plane substantially parallel to said predetermined region; and

a light receiving unit for receiving reflected light of scanning light of said optical scanning unit from said light retro-reflector, for detecting a scanning light cut-off position, which is produced in said predetermined region by an indicator, based on a light receiving output of said light receiving unit that corresponds to a scanning angle,

wherein ~~said optical scanning-type touch panel being characterized in that~~ said optical scanning unit is provided with a protective film having a maximum reflectance at an angle of incidence corresponding to a scanning angle at which a quantity of said reflected light is minimum.